

CLAIMS

1. Use of INDO and its pharmaceutically acceptable salts and derivatives for preparing a medicament for use in tissue cytoprotection treatments.
2. Use of INDO and its pharmaceutically acceptable salts and derivatives for
5 preparing a medicament for use in SARS (Severe Acute Respiratory Syndrome) treatment.
3. Use of INDO and its pharmaceutically acceptable salts and derivatives for preparing a medicament for use in the treatment of gastroenteritis.
4. Use according to claim 3 for treating infective gastroenteritis and gastroenteritis
10 caused by Rotavirus.
5. Use of INDO and its pharmaceutically acceptable salts and derivatives for preparing a medicament for use in the treatment of hemorrhagic fevers.
6. Use according to claim 5 for treating fevers caused by Filovirus, Bunyavirus, Arenavirus and Flavivirus.
- 15 7. Use of INDO and its pharmaceutically acceptable salts and derivatives for preparing a medicament for use in the treatment of viral diseases, those caused by genetically modified viruses being comprised.
8. Use of INDO and its pharmaceutically acceptable salts and derivatives for preparing a medicament for use in the treatment of viral diseases caused by
20 viruses selected in the group comprising, but not limited to: Parainfluenza viruses, A, B and C Influenza viruses; Respiratory Syncytial Virus; Reovirus; Rotavirus; Coronavirus; Parvovirus; Adenovirus; Papovavirus; Papillomavirus; Poxvirus; Filovirus.
9. Use of INDO and its pharmaceutically acceptable salts and derivatives for
25 preparing a medicament for use in the treatment of viral diseases selected in the group comprising, but not limited to: Acute Respiratory Syndrome; measles; mumps; viral encephalitis; virus-caused neoplasias.
10. Use according to claim 9 wherein the neoplasias are caused by HTLV-1 virus, Epstein-Barr virus, Hepatitis B virus, Hepatitis C virus, Papillomavirus,
30 Adenovirus.
11. Use according to claims 1-10 wherein INDO salts and derivatives are selected in the group comprising, but not limited to alkali metal salts, alkaline earth

metal salts, aluminium salts, zinc salts, ammonium salts, inorganic acid addition salts, organic acid addition salts.

12. Use according to claims 1-11 in veterinary medicine, agriculture and aquaculture.

5 13. Use according to claims 1-12 wherein INDO is administered at concentrations ranging between 10 and 1000 microM.

14. Use according to claims 1-12 wherein INDO is administered at concentrations ranging between 100 and 400 microM.

10 15. Use according to claims 1-12 wherein INDO is administered in combination with pharmaceutically acceptable carriers selected in the group comprising, but not limited to: preserving agents, solubilising agents, stabilising agents, wetting agents, emulsifiers, sweeteners, colourants, odourants, salts, buffers, coating agents, antioxidants.

15 16. Use according to claims 1-15 wherein INDO is administered by the oral, rectal, nasal, topical, vaginal, parenteral routes.

17. Use according to claims 1-16 wherein INDO is administered in combination with a carrier that is able to penetrate the BBB.

18. Pharmaceutical compositions using INDO in combination with pharmaceutically effective amounts of at least one compound selected among: Interferon, metals and corresponding salts and derivatives, prostanoids, antiviral drugs, and
20 corresponding mixtures for the treatment of diseases, comprising but not limited to: tissue cytoprotection; SARS; gastroenteritis; hemorrhagic fevers; respiratory diseases, diseases caused by Coronavirus, Parainfluenza and Influenza viruses being comprised; Respiratory Syncytial Virus; virus-caused
25 neoplasias; viral encephalitis; viral diseases in general, those caused by genetically modified viruses being comprised.

19. Compositions according to claim 18 wherein INDO salts and derivatives are selected in the group comprising, but not limited to alkali metal salts, alkaline earth metal salts, aluminium salts, zinc salts, ammonium salts, inorganic acid
30 addition salts, organic acid addition salts.

20. Compositions according to claims 18-19, wherein prostanoids are selected in the group comprising, but not limited to: cyclopentenone prostanoids, PGA_1 , PGA_2 , PGJ_1 , PGJ_2 , $\delta^{12}\text{-PGJ}_2$, 15-deoxy- $\delta^{12,14}\text{-PGJ}_2$.
21. Compositions according to claims 18-20, wherein the metals are selected in the group comprising, but not limited to: zinc, gold, selenium, bismuth and cadmium, and corresponding salts and derivatives.
22. Compositions according to claim 21, wherein the metal salts and derivatives are selected in the group comprising, but not limited to: chloride, sulfate, lactate, citrate, iodate, maleate, thiomaleate, diethyl-dithiocarbamate, butyl salicilate, fumarate, succinate, porfirin tetrakis metachloride.
23. Compositions according to claim 21, wherein the metal is Zn and corresponding salts and derivatives comprising, but not limited to: ZnCl_2 , Zn sulfate, Zn lactate, Zn iodate, Zn diethyl-dithiocarbamate, Zn butyl salicilate, Zn porfirin tetrakis metachloride.
24. Compositions according to claims 18-23, wherein antiviral drugs are selected in a group comprising, but not limited to: Ribavirin, acyclovir, amantadine, rimantadine, influenza virus neuroaminidase inhibitors, idoxuridine, fosfonacetic acid, AZT, DDC, viral protease inhibitors.
25. Compositions according to claim 24, wherein the viral protease inhibitors are the HIV protease inhibitors.
26. Compositions according to claims 18-25, wherein the gastroenteritis are infective gastroenteritis and gastroenteritis caused by Rotavirus.
27. Compositions according to claims 18-25, wherein the hemorrhagic fevers are those caused by Filovirus, Bunyavirus, Arenavirus and Flavivirus.
28. Compositions according to claims 18-25, wherein the virus-caused neoplasias are neoplasias caused by HTLV-1 virus, Epstein-Barr virus, Hepatitis B virus, Hepatitis C virus, Papillomavirus, Adenovirus.
29. Compositions according to claims 18-25, wherein viral diseases are caused by viruses selected in the group comprising but not restricted to: Herpesvirus, Picomavirus, Hepatitis B Virus, Hepatitis C virus, Togavirus, Retrovirus, Bunyavirus, Arenavirus, Rhabdovirus, Flavivirus, Parainfluenza Viruses, A B and C Influenza Viruses, Respiratory Syncytial Virus, Reovirus, Rotavirus,

Coronavirus, Parvovirus, Adenovirus, Papovavirus, Papillomavirus, Poxvirus, Filovirus, Measles and Mumps viruses.

30. Compositions according to claim 29, wherein Picornaviruses are: Rhinovirus, Echovirus, Hepatitis A Virus.

5 31. Compositions according to claim 29, wherein the Retroviruses are HIV and HTLV-1.

32. Compositions according to claims 18-31 wherein INDO is administered in combination with pharmaceutically acceptable carriers selected in the group comprising, but not limited to: preserving agents, solubilising agents, stabilising
10 agents, wetting agents, emulsifiers, sweeteners, colourants, odourants, salts, buffers, coating agents, antioxidants.

33. Compositions according to claims 18-32 wherein INDO is administered by the oral, rectal, nasal, topical, vaginal, parenteral routes.

34. Compositions according to claims 18-33 wherein INDO is administered in
15 combination with a carrier that is able to penetrate the BBB.

35. Compositions according to claims 18-34, wherein INDO is supplied as part of a pharmaceutical composition.

36. Compositions according to claims 18-34, wherein INDO is supplied as part of a kit.

20 37. Use of INDO and its pharmaceutically acceptable salts and derivatives in combination with pharmaceutically effective amounts of at least one compound selected among: Interferon, metals and corresponding salts and derivatives, prostanoids, antiviral drugs, and corresponding mixtures for preparing a medicament for the treatment of diseases, comprising but not limited to: tissue
25 cytoprotection; SARS; gastroenteritis; hemorrhagic fevers; respiratory diseases, diseases caused by Coronavirus, Parainfluenza and Influenza viruses being comprised; Respiratory Syncytial Virus; virus-caused neoplasias; viral encephalitis; viral diseases in general, those caused by genetically modified viruses being comprised.

30 38. Use according to claim 37 wherein INDO salts and derivatives are selected in the group comprising, but not limited to alkali metal salts, alkaline earth metal

salts, aluminium salts, zinc salts, ammonium salts, inorganic acid addition salts, organic acid addition salts.

39. Use according to claims 37-38, wherein prostanoids are selected in the group comprising, but not limited to: cyclopentenone prostanoids, PGA_1 , PGA_2 , PGJ_1 ,
5 PGJ_2 , $\delta^{12}\text{-PGJ}_2$, 15-deoxy- $\delta^{12,14}\text{-PGJ}_2$.
40. Use according to claims 37-39, wherein the metals are selected in the group comprising, but not limited to: zinc, gold, selenium, bismuth and cadmium, and corresponding salts and derivatives.
41. Use according to claim 40, wherein the metal salts and derivatives are
10 comprised in, but not limited to: chloride, sulfate, lactate, citrate, iodate, maleate, thiomaleate, diethyl-dithiocarbamate, butyl salicylate, fumarate, succinate, porphyrin tetrakis metachloride.
42. Use according to claim 40, wherein the metal is Zn and corresponding salts and derivatives comprising, but not limited to: ZnCl_2 , Zn sulfate, Zn lactate, Zn
15 iodate, Zn diethyl-dithiocarbamate, Zn butyl salicylate, Zn porphyrin tetrakis metachloride.
43. Use according to claims 37-42, wherein antiviral drugs are selected in a group comprising, but not limited to: Ribavirin, acyclovir, amantadine, rimantadine, influenza virus neuroaminidase inhibitors, idoxuridine, fosfonacetic acid, AZT,
20 DDC, viral protease inhibitors.
44. Use according to claim 43 wherein the viral protease inhibitors are the HIV protease inhibitors.
45. Use according to claims 37-44, wherein the gastroenteritis are infective gastroenteritis and gastroenteritis caused by Rotavirus.
- 25 46. Use according to claims 37-44, wherein the hemorrhagic fevers are those caused by Filovirus, Bunyavirus, Arenavirus and Flavivirus.
47. Use according to claims 37-44, wherein the virus-caused neoplasias are neoplasias caused by HTLV-1 virus, Epstein-Barr virus, Hepatitis B virus, Hepatitis C virus, Papillomavirus, Adenovirus.
- 30 48. Use according to claims 37-44, wherein viral diseases are caused by viruses selected in the group comprising but not restricted to: Herpesvirus, Picornavirus, Hepatitis B Virus, Hepatitis C virus, Togavirus, Retrovirus,

Bunyavirus, Arenavirus, Rhabdovirus, Flavivirus, Parainfluenza Viruses, A B and C Influenza Viruses, Respiratory Syncytial Virus, Reovirus, Rotavirus, Coronavirus, Parvovirus, Adenovirus, Papovavirus, Papillomavirus, Poxvirus, Filovirus, Measles and Mumps viruses.

5 49. Use according to claim 48, wherein Picornaviruses are: Rhinovirus, Echovirus, Hepatitis A Virus.

50. Use according to claim 48, wherein the Retroviruses are HIV and HTLV-1.

51. Use according to claims 37-50, wherein INDO is supplied as part of a pharmaceutical composition.

10 52. Use according to claims 37-50, wherein INDO is supplied as part of a kit.

53. Use according to claims 37-50, in veterinary medicine, agriculture and aquaculture.